CASE VT/95-22747/A/PCT

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE PCT NATIONAL STAGE APPLICATION OF

Group Art Unit:

ULRICH BERENS

Examiner:

INTERNATIONAL APPLICATION NO. PCT/EP 03/10568

FILED: SEPTEMBER 23, 2003

FOR: CHIRAL DIOLS, THEIR MANUFACTURE AND LIGANDS AND CATALYSTS DERIVED

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U.S. APPLICATION NO: 10/528,510

35 USC 371 DATE: MARCH 18, 2005

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 CFR 1.56, Applicant wishes to call the Examiner's attention to the references cited on the attached forms PTO-1449.

Copies of the International Search Report and the references cited therein are enclosed herewith.

The Examiner is advised that copending patent application No. 10/485,836 deals with related subject matter.

The Examiner is requested to consider the foregoing information in relation to this application and indicate that each reference was considered by returning a copy of the initialed PTO 1449 forms.

Respectfully submitted,

Kevin T. Mansfield Agent for Applicant Reg. No. 31,635

Ciba Specialty Chemicals Corporation Patent Department 540 White Plains Road P.O. Box 2005 Tarrytown, NY 10591-9005 (914) 785-7127 KTM/am/ Encl. References

> PTO-1449 Forms PCT Search Report

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| | G. Kraus et al., J. Org | g. Chem., | VOI. 00, (13 | 95), pp. 1154-1157 | | | | | | |
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| | G. Kraus et al., J. An | n. Chem. S | 30c., Vol. 1 | 15, (1993), pp. 5859-5 | ,860 | | | | | |
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| | F. Kaiser et al., J. Org | g. Chem., | Vol. 67, (20 | .002), pp. 9248-9256 | | | | | | |
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| | M. F. Semmelhack et | al., Tetral | hedron Letters, | Vol. 25, No. 30, pp. 31 | 71-3174 | , (198 | 84) | | | | |
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| | ivi. Saumier et al., Te | tranedron | Letters, Vol. 2 | 4, No. 49, pp. 5435-543 | 8, (1983 |) | | | | | |
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| | G. Kraus et al., Synle | tt, July 19 | 93, pp. 525-52 | 6 | | | | | | | |
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| | N. Meyer et al., Cher | n. Ber., Vo | ol. 113, pp. 130 |)4-1319, (1980) | | | | | | |
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| | R. Butz et al., J. Org. | Chem V | ol. 67 nn 269 | 9-2701, (2002) | | | | | | |
| | R. Buz et al., J. Org. | Chem., v | 01. 07, pp. 207 | 2701, (2002) | | | | | | |
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| | H. Kleijn et al., Tetra | hedron Le | etters, Vol. 42, | (2001), pp. 3933-3937 | | | | | | |
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| 1) | P. Skabara et al., J. C | org. Chem., | Vol. 64, (199 | 9), pp. 6418-6424 | | | | | | | |
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| | D. Domashandran at | al Tatraha | dran Lattana V | Vol. 29 No. 14 np. 241 | 7 2420 | (1007) | | | | | |
| | F. Kamachandran et | ai., Tetrane | dron Letters, | Vol. 38, No. 14, pp. 241 | 7-2420, | (1997) | | | | | |
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| | A. Deron et al., Hete | roatom Che | emistry, Vol. 1 | 3, No. 2, (2002), pp. 15 | 7-164 | | | | | | |
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